In the Claims

Please amend claims 23, 27, and 31-32. The amended claims are provided below in clean form. Per 37 C.F.R. § 1.121, amended claims are also shown in Appendix A with notations to indicate changes made (for convenience, all pending claims are provided in Appendix A).

C2

23. **(Once Amended)** A semiconductor device structure, the structure comprising:

a substrate assembly including a surface; and

a chemical vapor deposited barrier layer over at least a portion of the surface, wherein the barrier layer is formed of a platinum(x):ruthenium(1-x) alloy, where x is in the range of about 0.60 to about 0.995, and further wherein the barrier layer is substantially free of carbon.

C3

27. **(Once Amended)** A capacitor structure comprising:

a first electrode;

a dielectric material on at least a portion of the first electrode; and

a second electrode on the dielectric material, wherein at least one of the first electrode and second electrode comprises a chemical vapor deposited barrier layer of platinum(x):ruthenium(1-x) alloy, and further wherein the barrier layer is substantially free of carbon.

C4

31. **(Once Amended)** The structure of claim 30, wherein the one or more additional conductive layers are formed from materials selected from the group of metals and metal alloys; metal and metal alloy oxides; metal nitrides; and metal silicides.

32. **(Once Amended)** A memory cell structure comprising:

a substrate assembly including at least one active device; and

Cont C4

a capacitor formed relative to the at least one active device, the capacitor comprising at least one electrode including a chemical vapor deposited barrier layer formed of platinum(x):ruthenium(1-x) alloy, wherein the barrier layer is substantially free of carbon.